



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

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ATLANTA, GEORGIA 30303-8960

**JAN 05 2007**

Timothy Cardiasmenos  
NAVFAC Southeast  
2155 Eagle Drive  
Charleston, South Carolina 29406

**SUBJECT:** Draft Environmental Impact Statement for the Restoration of Clear Zones and Stormwater Drainage Systems at Boca Chica Field, Naval Air Station Key West, Florida; CEQ Number 20060461

Dear Mr. Cardiasmenos:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Draft Environmental Impact Statement (EIS) in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act. The U.S. Department of the Navy (Navy) proposes to restore clear zones and stormwater drainage systems at Boca Chica Field, Naval Air Station (NAS) Key West, located on Boca Chica Key in Monroe County, Florida

The proposed action includes the trimming and/or removal of vegetation that protrudes into vertically or laterally controlled airfield surfaces, clearing and grubbing, grading, filling low areas, replanting some areas with native salt marsh vegetation, and supplemental improvements to restore the function of drainage areas. Restoration methods will include the use of hand-clearing or mechanized methods (i.e., traditional construction equipment or specialized equipment). Maintenance methods will include mowing, hand-clearing, and prescribed burning, where feasible. These activities are necessary to ensure the safety of flight operations and to bring the airfield into compliance with existing Federal Aviation Administration, Department of Defense, and Navy airfield criteria. EPA offers the following comments from our review of the Draft EIS:

Alternatives

EPA has concerns that the preferred alternative does not adequately minimize the impacts to jurisdictional wetlands, particularly mangrove forests, in the project area. All the alternatives considered include the permanent removal of mangroves and other woody vegetation from the clear zones. It does not appear that an alternative was considered that analyzed the impacts of a long-term vegetative control maintenance program (i.e., mangrove trimming program), in lieu of either total clearing or mangrove conversion as described in Alternatives 1 and 2. Alternative 2 is clearly preferable to Alternative 1, with respect to minimizing wetland impacts. However, EPA recommends that the Final EIS include an analysis of the vegetative control alternative described above to assist in the selection of the least damaging practicable alternative in

accordance with Section 404(b)(1) guidelines of the Clean Water Act.

### Wetlands Impacts

The Draft EIS suggests that implementation of Alternative 2 would result in “no net loss of wetlands” within the project area. While this may be true based solely on acreage of replacement wetlands, it is not true by function. Alternative 2 would result in the conversion of approximately 28 acres of mangroves to high salt marsh and 103 acres of mangroves to “maintainable wetlands” (mowed grasslands/grassy salt marsh). Mangrove forest and high salt marsh may both be classified as wetlands, but they do not share all wetland functions equally. Mangrove removal will result in the loss of essential fish habitat and long-term reductions in detrital production and use of these areas as food and cover source by managed fish species that will not be replaced by salt marsh. An additional concern is migratory bird species which use mangroves (and upland hardwood habitats) as stop over feeding and roosting areas. These birds do not roost in salt marsh, and nesting birds, such as cuckoos, do not nest in salt marsh.

The underlying principle of “no net loss of wetlands” is that any compensatory mitigation will offset the functions and values of aquatic resources, including wetlands, which are lost as a result of permit actions. On a watershed basis, this should normally result in no net loss of aquatic functions, not just wetland acreage. In this context, the replacement of forested mangrove wetlands with mowed grasslands/grassy salt marsh does not result in “no net loss of wetlands” and should not be referred to as such in the Final EIS. In addition, there is very little discussion of the mitigation for these wetland impacts. The Final EIS should include a more detailed discussion of the compensatory mitigation that will be utilized to replace the lost functions and values mentioned above.

The U.S. Army Corps of Engineers (USACE) Jacksonville District issued a public notice for this project (Permit Application No. 2006-494) on October 6, 2006. It does not appear that the proposed work described in the public notice is for the entire proposed action as described in the Draft EIS. Is this public notice for the first phase of the overall restoration program? In general, EPA supports the phased implementation approach described below, especially for the purposes of allowing for adaptive management. However, EPA has concerns with a phased permitting approach that does not include a holistic mitigation plan for all impacts to jurisdictional waters. EPA recommends that the Final EIS include a description of the overall approach for wetlands permitting for this project, including a commitment to develop a comprehensive mitigation plan. By copy of this letter, EPA also submits these comments to the USACE Jacksonville District for consideration as part of their public interest review of the October 6, 2006, public notice.

### Endangered Species

Table 6-1 suggests that conversion of mangroves outside Lower Keys Marsh Rabbit (LKMR) habitat to maintainable wetlands would be considered a “conservation measure” for the LKMR on Boca Chica Key. Will the LKMR utilize periodically mowed grasslands as viable habitat? The Draft EIS does not include any discussion to address this issue. EPA recommends

that the Final EIS document the viability of this mitigation as a conservation measure, as well as the consultation record with the U.S. Fish and Wildlife Service and NOAA Fisheries as part of compliance with the Endangered Species Act and Magnuson-Stevens Fishery Conservation Management Act.

#### Adaptive Management/Monitoring

The Draft EIS suggests that the project will be implemented in phases, relying on monitoring and adaptive management to allow for changes to the proposed action in the future. The Draft EIS states, "By using a phased approach to this project, the Navy will be able to monitor the impacts to the ecosystem and to modify construction or other practices to reduce these impacts as related to future phases of the project. This adaptive management approach will allow the Navy to determine the best possible methods of airfield maintenance for the Lower Keys Marsh Rabbit (LKMR) and other threatened or endangered species, which will subsequently be reflected in the INRMP." There is no discussion in the Draft EIS of the process that will be followed to ensure a successful adaptive management approach. EPA recommends that the Final EIS include a thorough discussion of the overall adaptive management plan, including a detailed monitoring protocol (e.g., what will be monitored, when will monitoring occur, who will be involved in making adaptive management decisions, etc.). EPA recommends that the NAS Key West Natural Resources and Environmental Compliance Partnering Team be an active group involved in the development of the overall monitoring plan. This Team should be given the opportunity to suggest changes to the project as new information is discovered in accordance with the overall adaptive management concept.

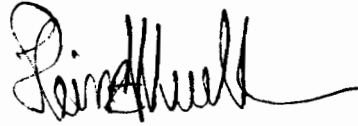
The Draft EIS identifies that there may be turbidity impacts associated with construction activities and mangrove removal. This could result in reduced light penetration and adverse impacts on submerged aquatic vegetation. The Draft EIS suggests that the overall project phasing, including implementation of sediment and erosion control measures, would minimize the impacts of turbidity on seagrass bed communities and other essential fish habitat. The Draft EIS includes a general stormwater permit, with limited project-specific information on any sediment control measures. Given the potential for adverse impacts to important resources, EPA strongly recommends development of a turbidity management plan, including construction monitoring, to be included in the stormwater pollution prevention plan for the project. Turbidity monitoring should be conducted during each phase of project implementation with the ability to cease ground disturbing activities when turbidity in receiving waters approaches the State water quality standard. A recent example of this concept is the comprehensive turbidity monitoring plan that was developed for the Key West Harbor Dredging Project. This commitment should be included in the Final EIS.

We rate this document and the preferred alternative as EC-2 (Environmental Concerns-with more information requested; enclosed is a summary of definitions for EPA ratings). We have concerns that the preferred alternative will have impacts on the environment that could and should be avoided. Corrective measures may require changes to the alternatives or application of additional mitigation measures that can reduce the environmental impact. The requested additional information or analyses should be included in the Final EIS to further explain the basis

for selection of the preferred alternative.

We appreciate the opportunity to review the proposed action. Please contact Ben West of my staff at (404) 562-9643 if you have any questions or want to discuss our comments further.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz Mueller", with a long horizontal flourish extending to the right.

Heinz J. Mueller, Chief  
NEPA Program Office  
Office of Policy and Management

Enclosure

cc: U.S. Army Corps of Engineers – Jacksonville District, Miami Regulatory Field Office

## **U.S. ENVIRONMENTAL PROTECTION AGENCY**

### **ENVIRONMENTAL IMPACT STATEMENT (EIS) RATING SYSTEM CRITERIA**

EPA has developed a set of criteria for rating Draft EISs. The rating system provides a basis upon which EPA makes recommendations to the lead agency for improving the draft.

#### **RATING THE ENVIRONMENTAL IMPACT OF THE ACTION**

- LO (Lack of Objections): The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action.
- EC (Environmental Concerns): The review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact.
- EO (Environmental Objections): The review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). The basis for environmental objections can include situations:
  1. Where an action might violate or be inconsistent with achievement or maintenance of a national environmental standard;
  2. Where the Federal agency violates its own substantive environmental requirements that relate to EPA's areas of jurisdiction or expertise;
  3. Where there is a violation of an EPA policy declaration;
  4. Where there are no applicable standards or where applicable standards will not be violated but there is potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives; or
  5. Where proceeding with the proposed action would set a precedent for future actions that collectively could result in significant environmental impacts.
- EU (Environmentally Unsatisfactory): The review has identified adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed. The basis for an environmentally unsatisfactory determination consists of identification of environmentally objectionable impacts as defined above and one or more of the following conditions:
  1. The potential violation of or inconsistency with a national environmental standard is substantive and/or will occur on a long-term basis;
  2. There are no applicable standards but the severity, duration, or geographical scope of the impacts associated with the proposed action warrant special attention; or
  3. The potential environmental impacts resulting from the proposed action are of national importance because of the threat to national environmental resources or to environmental policies.

#### **RATING THE ADEQUACY OF THE ENVIRONMENTAL IMPACT STATEMENT (EIS)**

- 1 (Adequate): The Draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- 2 (Insufficient Information): The Draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the Draft EIS, which could reduce the environmental impacts of the proposal. The identified additional information, data, analyses, or discussion should be included in the Final EIS.
- 3 (Inadequate): The Draft EIS does not adequately assess the potentially significant environmental impacts of the proposal, or the reviewer has identified new, reasonably available, alternatives, that are outside of the spectrum of alternatives analyzed in the Draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. The identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. This rating indicates EPA's belief that the Draft EIS does not meet the purposes of NEPA and/or the Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised Draft EIS.